



Complete Summary

TITLE

Eye care: percentage of patients aged 18 years and older with a diagnosis of primary open-angle glaucoma whose glaucoma treatment has not failed (the most recent IOP was reduced by at least 15% from the pre-intervention level) OR if the most recent IOP was not reduced by at least 15% from the pre-intervention level a plan of care was documented within 12 months.

SOURCE(S)

American Academy of Ophthalmology, Physician Consortium for Performance Improvement®, National Committee for Quality Assurance. Eye care physician performance measurement set. Chicago (IL): American Medical Association, National Committee for Quality Assurance; 2007 Oct. 36 p. [42 references]

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of patients aged 18 years and older with a diagnosis of primary open-angle glaucoma whose glaucoma treatment has not failed (the most recent intraocular pressure [IOP] was reduced by at least 15% from the pre-intervention level) OR if the most recent IOP was not reduced by at least 15% from the pre-intervention level a plan of care was documented within 12 months.

RATIONALE

1. Scientific basis for intraocular pressure (IOP) control as outcomes measure (intermediate)

Analyses of results of several randomized clinical trials all demonstrate that reduction of IOP of at least 18% (EMGT, CIGTS, AGIS, CNTGS) reduces the rate of worsening of visual fields by at least 40%. The various studies, however, achieved different levels of mean IOP lowering in realizing their benefit in patient outcomes, ranging from 18% in the "normal pressure" subpopulation of EMGT to 42% in the CIGTS study. As such, an appropriate "failure" indicator is to NOT achieve at least a 15% IOP reduction. The rationales for a failure indicator are that 1) the results of different studies can lead experienced clinicians to believe that different levels of IOP reduction are appropriate; 2) to minimize the impact of adverse selection for those patients whose IOP's are more difficult to control; and 3) because each patient's clinical course may require IOP reduction that may vary from 18 to 40+%.

In addition, "...[s]everal population based studies have demonstrated that the prevalence of POAG as well as the incidence of POAG increases as the level of IOP increases." These studies provide strong evidence that IOP plays an important role in the neuropathy of Primary Open Angle Glaucoma (POAG). Furthermore, studies have demonstrated that reduction in the level of IOP lessens the risk of visual field progression in open-angle glaucoma. In addition, treated eyes that have a greater IOP fluctuation are at increased risk of progression.

Intraocular pressure is the intermediate outcome of therapy used by the Food and Drug Administration (FDA) for approval of new drugs and devices and, as noted above, has been shown to be directly related to ultimate patient outcomes of vision loss. As such, failure to achieve minimal pressure lowering, absent an appropriate plan of care to address the situation, would constitute performance whose improvement would directly benefit patients with POAG.

2. Evidence for gap in care

Based on studies in the literature reviewing documentation of IOP achieved under care, the gap could be as great as 50% or more in the community of ophthalmologists and optometrists treating patients with POAG. Based on loose criteria for control, IOP was controlled in 66% of follow-up visits for patients with mild glaucoma and 52% of visits for patients with moderate to severe glaucoma. Another study of a single comprehensive insurance plan suggested that a large proportion of individuals felt to require treatment for glaucoma or suspect glaucoma are falling out of care and are being monitored at rates lower than expected from recommendations of published guidelines.

The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines (from the American Academy of Ophthalmology [AAO]) and represent the evidence base for the measure:

The initial target pressure selected should be at least 20% lower than the pretreatment IOP, depending upon the clinical findings. Further reduction of the target IOP is often also justified by the severity of existing optic nerve damage, the level of the measured pretreatment IOP, the rapidity with

which the damage occurred, and other risk factors. In general, the more advanced the damage, the lower the initial pressure should be. (AAO)

Please note that the American Optometric Association's (AOA) 2002 guideline on Open-angle Glaucoma was not reviewed during the development of this measure prior to the public comment period and therefore is not presented here verbatim. Review of the AOA guideline subsequent to initial measure development indicates that the recommendations in the AOA guideline are consistent with the intent of the measure. As such, the intent of this measure is to have this indicator apply to both optometrists and ophthalmologists (and any other physician who provides glaucoma care); the use of "ophthalmologists" only in the preceding verbatim section reflects the wording in the American Academy of Ophthalmology Preferred Practice pattern.

PRIMARY CLINICAL COMPONENT

Primary open-angle glaucoma (POAG); intraocular pressure (IOP)

DENOMINATOR DESCRIPTION

All patients aged 18 years and older with a diagnosis of primary open-angle glaucoma (POAG) (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

NUMERATOR DESCRIPTION

Patients whose glaucoma treatment has not failed (the most recent intraocular pressure [IOP] was reduced by at least 15% from the pre-intervention level) OR if the most recent IOP was not reduced by at least 15% from the pre-intervention level a plan of care was documented within 12 months (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

NATIONAL GUIDELINE CLEARINGHOUSE LINK

- [Primary open-angle glaucoma.](#)

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Overall poor quality for the performance measured
Variation in quality for the performance measured

EVIDENCE SUPPORTING NEED FOR THE MEASURE

American Academy of Ophthalmology, Physician Consortium for Performance Improvement®, National Committee for Quality Assurance. Eye care physician performance measurement set. Chicago (IL): American Medical Association, National Committee for Quality Assurance; 2007 Oct. 36 p. [42 references]

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Ambulatory Care
Physician Group Practices/Clinics

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Individual Clinicians

TARGET POPULATION AGE

Age greater than or equal to 18 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Unspecified

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

Unspecified

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

All patients aged 18 years and older with a diagnosis of primary open-angle glaucoma (POAG)

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

All patients aged 18 years and older with a diagnosis of primary open-angle glaucoma (POAG)

Exclusions

Documentation of system reason(s) for not reducing the intraocular pressure

(IOP) by at least 15% from the pre-intervention level or documenting a plan of care

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition
Encounter

DENOMINATOR TIME WINDOW

Time window is a single point in time

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

Patients whose glaucoma treatment has not failed (the most recent intraocular pressure [IOP] was reduced by at least 15% from the pre-intervention level) OR if the most recent IOP was not reduced by at least 15% from the pre-intervention level a plan of care was documented within 12 months

Plan of care may include: recheck of IOP at specified time, change in therapy, perform additional diagnostic evaluations, monitoring per patient decisions or health system reasons, and/or referral to a specialist.

Exclusions

None

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Administrative data
Medical record

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure**SCORING**

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

Internal time comparison

Evaluation of Measure Properties**EXTENT OF MEASURE TESTING**

Unspecified

Identifying Information**ORIGINAL TITLE**

Measure #1 primary open-angle glaucoma: reduction of intraocular pressure (IOP) by 15% OR documentation of a plan of care.

MEASURE COLLECTION

[The Physician Consortium for Performance Improvement® Measurement Sets](#)

MEASURE SET NAME

[Eye Care Physician Performance Measurement Set](#)

SUBMITTER

American Medical Association on behalf of the American Academy of Ophthalmology, the National Committee for Quality Assurance, and the Physician Consortium for Performance Improvement®

DEVELOPER

American Academy of Ophthalmology
National Committee for Quality Assurance
Physician Consortium for Performance Improvement®

FUNDING SOURCE(S)

Unspecified

COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

Paul P. Lee, MD, JD (*Co-Chair*); Jinnet B. Fowles, PhD (*Co-Chair*)

Non-surgical Management Subgroup:

Richard L. Abbott, MD; Lloyd P. Aiello, MD, PhD; Murray Fingeret, OD; Andrea Gelzer, MD, MS, FACP; Mathew MacCumber, MD; Mildred M.G. Olivier, MD; Marcus G. Piccolo, OD; Sam J.W. Romeo, MD, MBA

Surgical Management Subgroup:

Priscilla P. Arnold, MD; Andrea Gelzer, MD, MS, FACP; Richard Hellman, MD, FACP, FACE; Leon W. Herndon, MD; Jeffrey S. Karlik, MD; James L. Rosenzweig, MD, FACE; John T. Thompson, MD

Flora Lum, MD, American Academy of Ophthalmology

Karen S. Kmetik, PhD, American Medical Association; Heidi Bossley, MSN, MBA, American Medical Association; Stephen Havas, MD, MPH, American Medical Association

Donna Pillittere, National Committee for Quality Assurance; Phil Renner, MBA, National Committee for Quality Assurance

Susan Nedza, MD, MBA, FACEP, Centers for Medicare & Medicaid Services; Sylvia Publ, MBA, RHIA, Centers for Medicare & Medicaid Services

Timothy F. Kresowik, MD, Facilitator; Rebecca A. Kresowik, Facilitator

FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

Conflicts, if any, are disclosed in accordance with the Physician Consortium for Performance Improvement® conflict of interest policy.

INCLUDED IN

Ambulatory Care Quality Alliance

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2007 Oct

MEASURE STATUS

This is the current release of the measure.

SOURCE(S)

American Academy of Ophthalmology, Physician Consortium for Performance Improvement®, National Committee for Quality Assurance. Eye care physician performance measurement set. Chicago (IL): American Medical Association, National Committee for Quality Assurance; 2007 Oct. 36 p. [42 references]

MEASURE AVAILABILITY

The individual measure, "Measure #1 Primary Open-angle Glaucoma: Reduction of Intraocular Pressure (IOP) by 15% OR Documentation of a Plan of Care," is published in the "Eye Care Physician Performance Measurement Set." This document and technical specifications are available in Portable Document Format (PDF) from the American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® Web site: www.physicianconsortium.org.

For further information, please contact AMA staff by e-mail at cqi@ama-assn.org.

NQMC STATUS

This NQMC summary was completed by ECRI Institute on February 13, 2008. The information was verified by the measure developer on April 22, 2008.

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